

# RAPID ACQUISITION

BY

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## USAWC CLASS OF 2010

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*Disclaimer*

*The views expressed in the academic research paper are those of the author and do not necessarily reflect the official policy or position of the US Government, the Department of Defense, or any of its agencies.*

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## **ABSTRACT**

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This paper will compare and contrast the findings and recommendations of recent studies as well as compare and contrast the deliberate acquisition process with the rapid acquisition processes in use by United States Special Operations Command (USSOCOM) and the REF. The analysis will attempt to answer the following: 1) Should there be two different processes: one for deliberate acquisition and the other for rapid acquisition? 2) Should the ad hoc rapid acquisition organizations be formalized and function alongside the organizations that conduct deliberate acquisition?



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# RAPID ACQUISITION

## **Introduction**

The United States has been at war for more than eight years. During this time, the Army has spent billions of dollars to procure materiel to ensure Soldiers fighting the war continue to be the best equipped. A quick comparison of how Soldiers are equipped today versus how they were equipped just eight years ago demonstrates the effectiveness of the Acquisition community to deliver capability to Soldiers in the fight. Eight years ago, the majority of Soldiers in Brigade Combat Teams (BCTs) still had M16 rifles with too few optics and not enough individual body armor for everyone crossing the *Line of Departure*. Many rode into battle in soft skinned High Mobility Multipurpose Wheeled Vehicles (HMMWVs) with ring mounts that exposed gunners and not all vehicles had communication equipment. The Blue Force Tracker (BFT) was in its infancy and most Unmanned Aerial Vehicles (UAVs) were operated by the Air Force. Today, all Soldiers in BCTs assigned a rifle have M4 carbines with either a Close Combat Optic (CCO) or a Rifle Combat Optic (RCO). Every Soldier has the Improved Outer Tactical Vest (IOTV) with Enhanced Small Arms Protective Inserts (ESAPI) as well as the Advanced Combat Helmet (ACH). Soldiers ride in Up-Armored HMMWVs (UAHs) or Mine-Resistant Ambush-Protected (MRAP) vehicles that are equipped with communications equipment and many have Common Remote Operating Weapons Station (CROWS) to protect gunners and UAVs are employed by Army BCTs within their own battle space. These are just a small number of examples of the capabilities that the Army has fielded since the start of the war either as improvements to existing capabilities or as all-together new capabilities. Many of these improvements or new capabilities were derived from lessons learned on the ground and from an evolving threat. The issue since the start of the war, however, has been less about providing capability to Soldiers, and more about the speed in which it is provided. Although U.S. Soldiers are the best equipped, are the acquisition processes agile and flexible enough to respond more quickly to an ever evolving threat in persistent conflict? Is the Army's Acquisition community adequately organized to respond rapidly with the materiel that Soldiers need to remain dominant on the

battlefield? Can improvements to the responsiveness of acquisition carry over into times of peace?

Recent studies completed by a Defense Science Board Task Force and by the Business Executives for National Security have examined the current processes and organizations and made recommendations as to how to improve the responsiveness of meeting the needs of the Soldiers in the fight. Generally speaking, the findings of these studies narrow to three logical areas that influence rapid acquisition: requirements, resourcing, and people. The recommendations vary. Some suggest that there should be two distinct processes or dual acquisition paths: one for deliberate acquisition and the other for rapid acquisition. Some recommend formalizing the ad hoc organizations that have formed over the years out of necessity as a means to bypass the traditional organizations that adhere to deliberate acquisition. One recommendation is to establish a new organization at the Office of the Secretary of Defense (OSD) level to administer *rapid acquisition* separate and distinct from *deliberate acquisition*. Others recommend revamping existing organizations and applying more discipline to existing processes. Most agree that there is a need to better identify, assess, and prioritize needs from the field as well as a need for dedicated and flexible funding that support rapid acquisition. Additionally, there is general agreement that there is a need for knowledgeable and experienced acquisition professionals, especially in the areas of contracting, systems engineering, cost estimating, and program management.

To establish a baseline of understanding and provide a context for rapid acquisition, this paper will provide an overview of the Department of Defense's (DoD's) three principal decision-making support systems that provide an integrated approach to strategic planning for requirements determination, resourcing, and systems acquisition. This paper will examine historical and contemporary examples of rapid acquisition for best practices and lessons learned. It will also further compare the findings and recommendations of the studies previously mentioned to identify common themes of how to improve the acquisition community's responsiveness to the needs of Soldiers, whether in the fight or during times of peace. Lastly, the paper will argue that with risk-accepting leadership, logical prerequisites, flexible funding, teamwork, and use of judgment, the existing processes are flexible and agile enough to facilitate responsible rapid acquisition



that can get a capability to the field sooner while at the same time reducing the risk for deliberate acquisition. The paper will argue that some currently ad hoc organizations should be institutionalized and that some currently institutionalized organizations should be revamped. Finally, this paper will argue that the critical element for sustaining rapid acquisition as an institutionalized concept is dedicated and flexible funding. This will require OSD and congressional support and understanding, especially in a resource constrained environment. Without dedicated and flexible funding, rapid acquisition is just a good idea.

## **Background**

### **Deliberate Acquisition**

The DoD has three principal decision-making support systems that the service components adhere to for the ultimate objective of providing the Combatant Commands (COCOMs) with the best mix of forces, equipment, and support attainable within resource constraints.<sup>1</sup> The three principal decision-making support systems are The Joint Capabilities Integration and Development System (JCIDS); the Planning, Programming, Budgeting and Execution (PPBE) process; and the Defense Acquisition System (DAS). Each system addresses one of the three key elements for deploying a materiel capability—Requirement Determination, Funding Allocation, and Acquisition—and together they represent *Big “A”* acquisition as depicted in Figure 1.

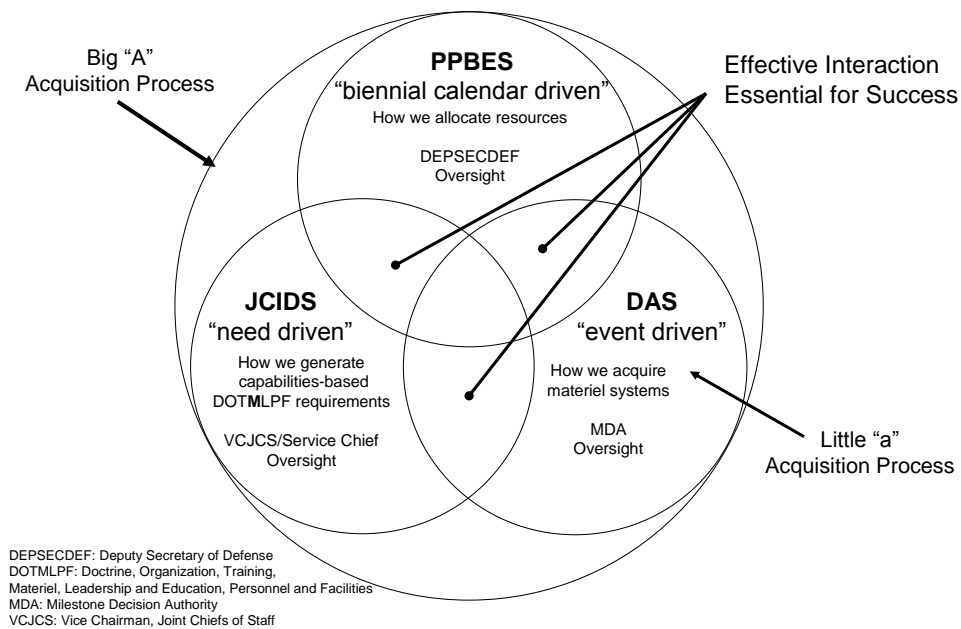


Figure 1 DoD Decision Support Systems.<sup>2</sup>

There is continuous collaboration between the processes to answer four basic questions for decision-makers: 1) What is the requirement?; 2) What is the Acquisition Strategy?; 3) What is the cost estimate?; and 4) Is it affordable? Although there is continuous collaboration between the processes, there is a fundamental sequence in which their respective outputs result in a materiel system for the Warfighter—the JCIDS process produces an approved requirement that is resourced during the PPBE process and once funding is made available is then procured by the DAS. Each of these systems has its own set of regulations, procedures, staffing requirements, timelines, chain of decision authorities, and oversight. These three systems, taken together, represent what many consider as *deliberate acquisition*.

### Generating the Requirement - Joint Capabilities Integration and Development System

The first step in *deliberate acquisition* is requirement determination through JCIDS. The JCIDS is a systematic method established by the Chairman of the Joint Chiefs of Staff (CJCS) for identifying, assessing, and prioritizing gaps in joint

warfighting capabilities and recommending potential solution approaches to resolve these gaps.<sup>3</sup> The JCIDS process is managed by the Joint Staff, J8 with oversight provided by the Joint Requirements Oversight Council (JROC) chaired by the Vice Chief, Joint Chiefs of Staff (VCJCS). The JCIDS process supports the DAS by identifying and assessing capability needs and associated performance criteria to be used as a basis for acquiring the right capabilities, including the right systems. These capability needs then serve as the basis for the development and production of systems to fill those needs. Additionally, it provides the PPBE process with affordability advice by assessing the development and production lifecycle cost.<sup>4</sup>

The Training and Doctrine Command (TRADOC) Army Capabilities Integration Center (ARCIC) implements the JCIDS process for the Army through its Capability Development Integration Directorates (CDIDs) located within each of its newly established Centers of Excellence (CoE) such as the Maneuver CoE at Fort Benning, Georgia.<sup>5</sup> The CDIDs perform significant analyses—Capabilities Based Assessment (CBA) consisting of the Functional Area Analysis (FAA), the Functional Needs Analysis (FNA), and the Functional Solutions Analysis (FSA)—as prescribed by JCIDS that analyze both non-materiel and materiel approaches to address the gap. The CBA supports validation of the gap prior to staffing the requirement documentation for validation and approval. The requirement documentation that establish the need for a materiel acquisition program, how the materiel will be employed, and what the materiel must be capable of doing are the Initial Capabilities Document (ICD), the Capability Development Document (CDD), and the Capability Production Document (CPD). These requirement documents are sequential and support acquisition programs by progressively adding more specificity to the required performance and design specifications of the materiel solution.<sup>6</sup> The staffing process that validates and approves the ICD, CDD, and CPD is multilayered through TRADOC to the Army G3/5/7 and Army Requirements Oversight Council (AROC) chaired by the Vice Chief of Staff of the Army (VCSA) to the Joint Staff, J8 and JROC as depicted in Figure 2.

## JCIDS Document Validation and Approval Staffing Process

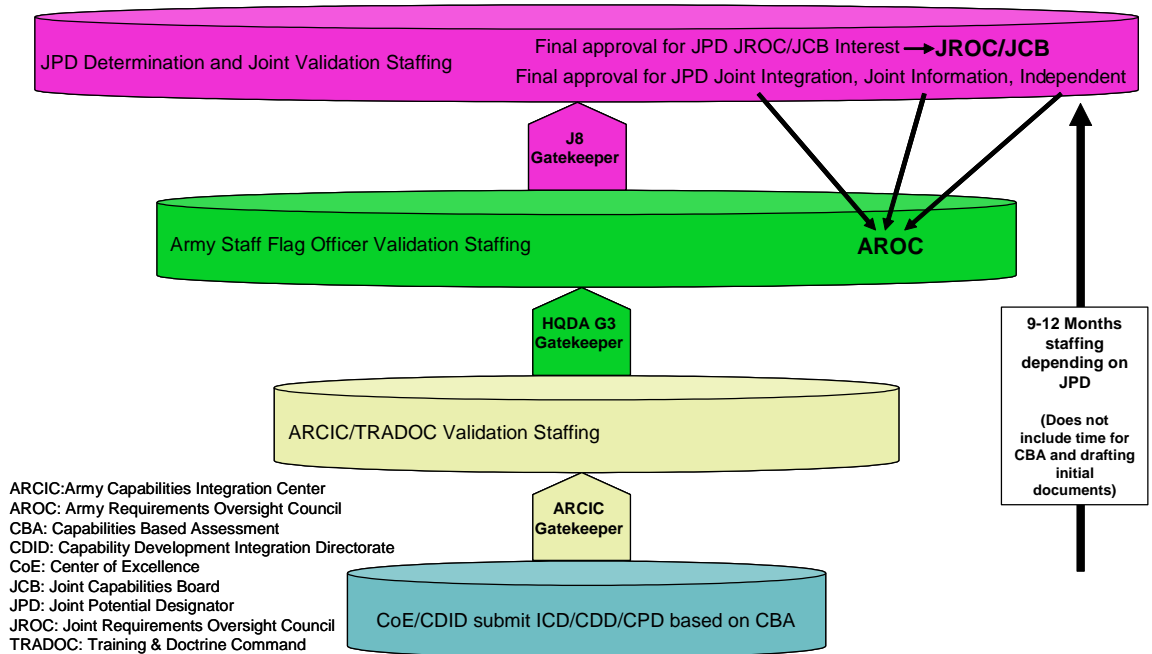


Figure 2 JCIDS Validation and Approval Staffing Process.

Based on content of the submission, the Joint Staff *Gatekeeper* assigns a Joint Potential Designator (JPD) to each ICD, CDD, or CPD. The JPD determines the JCIDS validation and approval process and the potential requirement for certifications/endorsements. The various JPDs are JROC interest, Joint Capabilities Board (JCB) interest, Joint Integration, Joint Information, or Independent.<sup>7</sup> Under optimal conditions, the validation and approval process for requirement documents is nine to twelve months depending on the JPD. This does not include the time it takes to conduct the required analyses and draft the documentation. This is an analytically and staffing intensive deliberative process that many argue takes too long but ultimately provides senior decision-makers at the Joint and Service component levels with the information necessary to make long-term investment decisions and identify those potential solutions that address gaps/have impacts across the services or are determined to be service unique. Although JCIDS is analytically and

staffing intensive, the Joint Staff Instruction<sup>8</sup> and Manual<sup>9</sup> that guides its implementation recognizes that there are varying degrees of investment, complexity, and visibility for capabilities/systems and therefore allow for tailoring of the required analyses to suit the issue. Once the requirement is approved, it must be prioritized against other approved requirements and compete for resources in the PPBE process.

### **Resourcing - Planning, Programming, Budgeting, and Execution**

In 2003, the DoD evolved from the Planning, Programming, and Budgeting System (PPBS) that first appeared in the 1960s to the PPBE process as its primary resource management system that ties together strategy, programs, and resources. The intent is to do a better job of strategically linking major decisions such as systems acquisition of a need identified in JCIDS to both the Defense Planning Guidance (DPG) and to program and budget development. Additionally, PPBE places increased emphasis on execution of funds and replaced the annual Program Objective Memorandum (POM)/Budget Estimate Submission (BES) cycle with a two-year POM/BES cycle.<sup>10</sup> The POM is the principal programming document that details how a component proposes to respond to assignments in the DPG and satisfy its assigned functions over the Future Years Defense Program (FYDP). The POM shows programmed needs six years hence which is the FYDP (i.e., in FY 2010, POM 2012–2017 will be submitted).<sup>11</sup> The POM results from top-down strategic guidance and a bottoms-up build through numerous decision committees and processes at the Army Command, Army Staff, and OSD staff levels.

The introduction of the two-year cycle is significant and important to understand because it is intended to guide the other decision processes such as strategy development, the identification of needs for military capabilities (i.e., JCIDS), program planning, resource estimation and allocation, and acquisition. The years within the two-year cycle are labeled as *On-year* and *Off-year* as depicted in Figure 3.

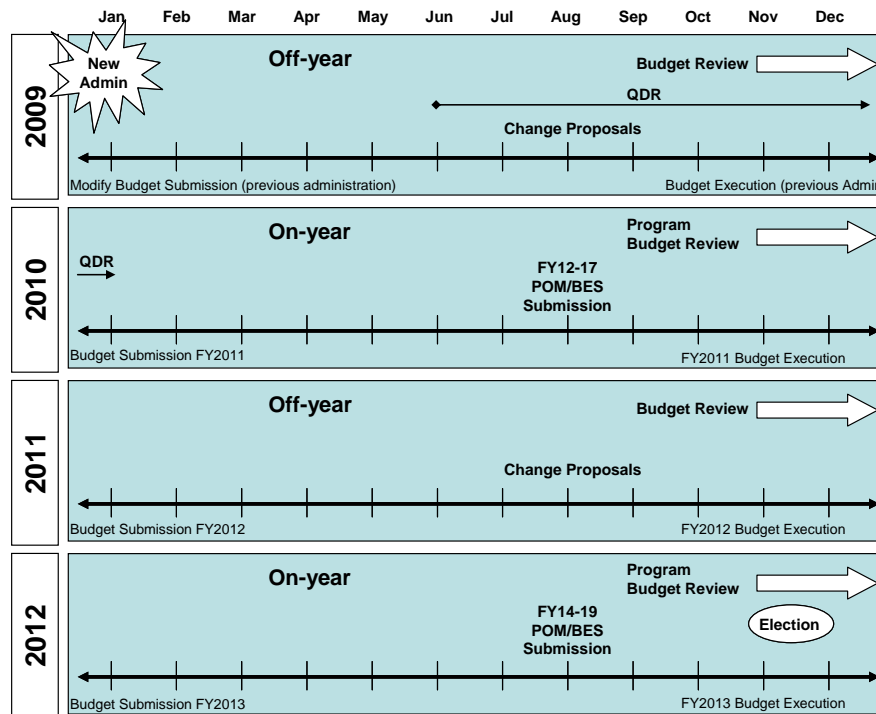


Figure 3 DoD 2-Year Cycle.<sup>12</sup>

This distinction is essential to understand because DoD uses a restricted process in the *Off-year* to develop an amended budget that allows for only modest program or budget adjustments using offsets to account for fact-of-life changes (e.g., program cost increases or schedule delays).<sup>13</sup> In other words, the *On-year* is intended for making decisions on new programs. For that reason, the requirements community, supported by the Acquisition community, should target the *On-year* for planning purposes for having approved JCIDS compliant requirements with cost estimates that can be prioritized and compete for resourcing in the PPBE process. It should be noted that when a requirement competes for resources, it takes nearly two years before the budget is enacted and the funding available to initiate that program. The consequence of not being prepared to compete for resourcing in the *On-year* is having to wait nearly two years until the next

*On-year* cycle and then nearly an additional two years for the funding to be enacted in the budget before the program is initiated—or almost four years to start a program from when the requirement is approved. Bottom line: if the program is not in the POM, it is not a program. Once a requirement is approved by JCIDS and is resourced through the PPBE process, it can then enter the formal acquisition process known as the DAS.

## Acquisition – Defense Acquisition System

The DAS exists to manage the nation's investments in technologies, programs, and product support necessary to achieve the National Security Strategy and support the United States Armed Forces.<sup>14</sup> When people think of acquisition, they typically think of what encompasses the DAS, but the DAS represents *Little “a”* acquisition as depicted in Figure 1 and occurs *after* the requirement is determined, prioritized and funded. The DAS neither determines requirements nor allocates funds but does support the systems that do. The DAS uses the Defense Acquisition Management System as depicted in Figure 4 as the framework for the logical progression of a stated requirement to a fielded system.

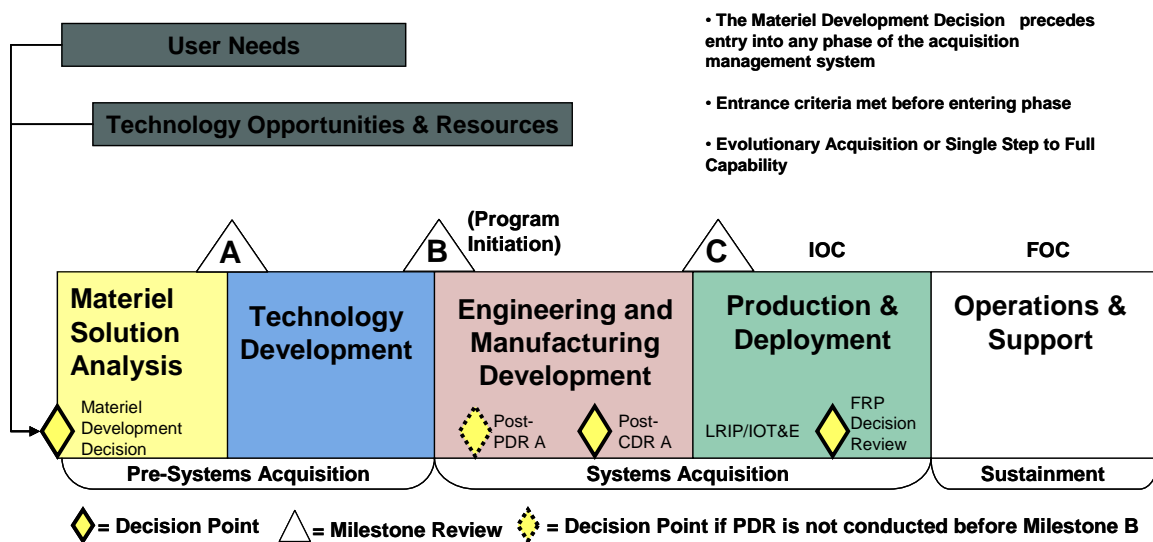


Figure 4 Defense Acquisition Management System.<sup>15</sup>

This framework provides a guide for the Acquisition workforce to develop, test, procure, field, and sustain weapon systems. It is event-driven and consists of a series of decision

points, milestone reviews, and phases that assess potential materiel solutions, reduce technology risks, develop an affordable, producible, military useful capability, achieve an operational capability that satisfies mission needs, and then sustains the capability in the most cost-effective manner over its total life cycle. The DoD Instruction that provides written guidance for implementing the DAS explicitly empowers Milestone Decision Authorities (MDAs) and Program Managers (PMs) to exercise discretion and prudent business judgment in structuring tailored, responsive, and innovative programs. Additionally, it prescribes evolutionary acquisition as the preferred DoD strategy for rapid acquisition of mature technology for the user. An evolutionary approach delivers capability in increments, recognizing the need for future capability improvements up-front. The objective is to balance needs and available capability with resources, and to put capability into the hands of the user quickly. The success of the strategy depends on phased definition by the requirements community of capability needs and system requirements, and the maturation of technologies that lead to disciplined development and production of systems that provide increasing capability over time.<sup>16</sup> The MDA is the designated individual (Defense Acquisition Executive, Component Acquisition Executive, General Officer or Senior Executive Service) with overall responsibility for a program. He or she has the authority to approve entry of an acquisition program into the next phase of the acquisition process and is accountable for cost, schedule, and performance reporting to higher authority, including congressional reporting.<sup>17</sup>

It is also important to note that, in addition to the MDA and PM having explicit guidance from the DoD Directive to use discretion and business judgment to tailor responsive and innovative programs, they are supported by their strategic partners (Contracting, Testing, and Logistics) that have similar guidance. The statement of guiding principles for contracting personnel is that the role of each member of the acquisition team is to exercise personal initiative and sound business judgment in providing the best value product or service to meet the customer's needs. In exercising initiative, Government members of the acquisition team may assume if a specific strategy, practice, policy, or procedure is in the best interests of the Government and is not addressed in the Federal Acquisition Regulation (FAR), nor prohibited by law (statute or case law), Executive Order or other regulation, that the strategy, practice, policy, or



procedure is a permissible exercise of authority.<sup>18</sup> The Army Test and Evaluation (T&E) policy provides the flexibility to allow each acquisition program to tailor a T&E strategy to achieve maximum program support.<sup>19</sup> The Army Regulation for Logistics directs that all acquisition programs will use the Integrated Logistics Support (ILS) process as a tool to help develop the acquisition strategy. The process may be tailored (with full consideration to applicable statutes) to minimize the time it takes to satisfy an identified capability gap.<sup>20</sup> At a minimum and paramount for ILS consideration are Manpower and Personnel, Maintenance Planning, Supply Support, and Training and Training Support when fulfilling an urgent operational need for example.<sup>21</sup> The policies and regulations that guide the acquisition workforce in implementing the DAS are flexible enough to permit use of discretion and judgment in supporting the MDA and PM in tailoring responsive and innovative programs.

Based on the varying degrees of investment, complexity, and visibility that a requirement document is assessed, it is assigned a potential Acquisition Category (ACAT). ACATs were established to facilitate decentralized decision making, execution, and compliance with statutorily imposed requirements. The categories determine the level of review, decision authority, and applicable procedures in the DAS.<sup>22</sup> There are three ACAT levels with ACAT I being the highest with either the Defense Acquisition Executive (DAE) or the Army Acquisition Executive (AAE) being the MDA. The lowest ACAT level is ACAT III with decision authority delegated to a General Officer or a Senior Executive Service. Generally speaking, the greater the investment/the complexity/the visibility of a program, the higher the ACAT level the program is assigned. The higher the ACAT level, the more staffing is required, which inherently adds more time to the program schedule.

When an ICD demonstrates the need for a materiel solution, the JROC or AROC recommends that the appropriate MDA for the potential ACAT level convene a formal Material Development Decision (MDD) review.<sup>23</sup> The MDD review is the formal entry point into the DAS and is mandatory for all potential acquisition programs. Following the MDD review, the MDA may authorize entry into the DAS at any point consistent with phase-specific entrance criteria and statutory requirements. Progress through the DAS depends on the MDA obtaining sufficient knowledge to continue to the next phase of

development. At each milestone review or decision point, the MDA determines to initiate, continue, modify, or terminate a program or effort. Milestone B is when the MDA formally initiates an acquisition program and authorizes entry into the Engineering and Manufacturing Development (EMD) phase. Prior to Milestone B is the Technology Demonstration (TD) phase. The activities in the TD phase are technology projects rather than an acquisition program and are considered pre-system acquisition. Generally speaking, for technology projects that transition from the TD phase to the EMD phase, the weapon system or increment can be developed for production within a short timeframe (normally within five years).<sup>24</sup> Conversely, a program that is not developmental and is comprised of *non-development items* (NDI) or modified *commercial off-the-shelf* (COTS) items can reasonably be expected to take two to three years to complete the EMD phase and transition to the Production and Deployment phase for fielding and sustainment. This is based on the time to downselect from a competition, to complete integrated testing, to complete Type Classification and Material Release activities, and to complete staffing processes for decisions.

### **Putting it all Together**

The previous three sections provide a brief overview of the three distinct and complex decision-making support systems that must be synchronized and integrated in order to efficiently deploy operationally effective, supportable, suitable and safe capabilities to the Warfighters. Of the three systems, the PPBE process is arguably the most rigid in that the process is recurring on a set schedule and does not distinguish between small or large investments in determining the level of review, decision authority, and applicable procedures. Both the JCIDS and the DAS are more flexible in that they are need-driven and event-driven and do distinguish between varying degrees of investment/visibility/technical complexity to determine the level of review, decision authority, and applicable procedures. Additionally, both permit use of discretion to tailor the process according to the magnitude of the issue. The PPBE provides a constant recurring window of opportunity every two years for the requirements community, supported by the acquisition community, to target for having approved requirements. The schedule to the left and right of the PPBE window of opportunity can be affected by the

discretion and tailoring permitted by the JCIDS and the DAS, but it appears that it is generally two years from when a requirement is approved and funding requested until funding is available to initiate a program.

When the activity timelines to complete each of these processes are synchronized and integrated, it can be expected to take at least five to six years from the time that a capability gap is identified to when a materiel solution is fielded under the best conditions. This scenario (as shown in Figure 5) assumes that the capability is service unique (receives an Independent JPD), is ACAT III (considered to be a relatively small investment with low visibility and not technically complex), is NDI or modified COTS, and is funded in the POM (not from supplemental funds).

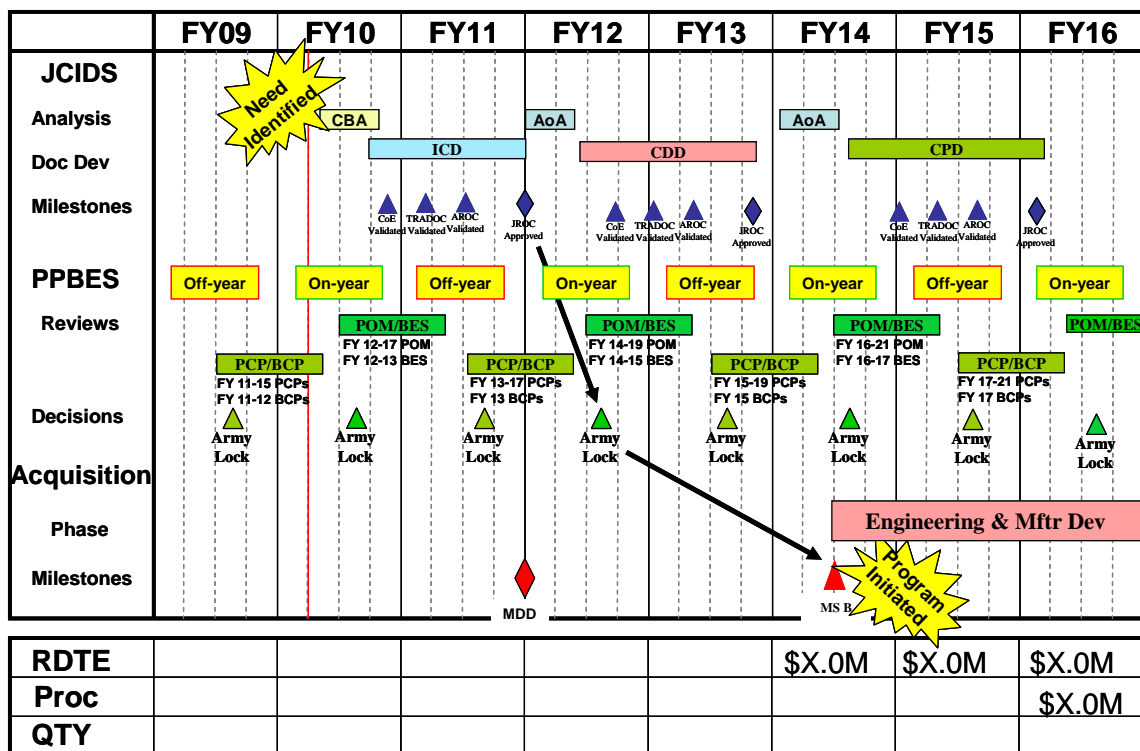


Figure 5 Synchronized JCIDS, PPBE, and DAS.

Inferred from this...as you increase in *Jointness*, in the level of investment/visibility/technical complexity, the time it takes from capability gap identification to fielded materiel solution correspondingly increases. Much of the increase

in time can be attributed to the increase in rigor for analysis and the increase in administrative staffing. Another contributor to increased schedule is technical complexity. The more a program requires further maturing/integrating technologies, the longer it will take to field a military useful capability that is operationally effective, supportable, suitable, and safe.

This deliberative approach to acquisition has arguably made U.S. Warfighters the best-equipped, most technically advanced in the world. However, it is also deemed by many as too slow to be responsive to the needs of the Warfighter who is fighting an ever evolving threat. In the past, but especially since the war began nearly eight years ago, a number of processes and organizations have emerged intended to be more responsive in getting capabilities to the Warfighter rapidly.

### **Rapid Acquisition**

Rapid Acquisition is a process intended to get capabilities to the Warfighter more rapidly than following the deliberate approach previously described. Like the deliberate approach, Rapid Acquisition includes the three key elements for deploying a materiel capability—Requirement Determination, Funding Allocation, and Acquisition. Additionally, like deliberate acquisition, decision-makers are confronted with and must consider four essential questions: 1) What is the requirement?; 2) What is the Acquisition Strategy?; 3) What is the cost estimate?; and 4) Is it affordable? This section will review four examples of rapid acquisition: the Warfighter Rapid Acquisition Program (WRAP); Wartime Acquisition; the Army's Rapid Equipping Force (REF); and the United States Special Operations Command (USSOCOM) acquisition.

### **Warfighter Rapid Acquisition Program**

The idea of putting new weapon systems into the hands of Warfighters quickly is not new and predates the current war. In the mid-nineties, the Army was testing new technologies that supported a new warfighting concept called Force XXI. Force XXI was how the Army envisioned it would conduct military operations in the 21<sup>st</sup> Century and fielding of the first digitized division in 2000 was the objective. The technologies that enabled Force XXI were being tested in Advanced Warfighting Experiments (AWEs) involving the 4<sup>th</sup> Infantry Division. Recognizing that following the normal resourcing

process would extend the time it would take to field these new technologies, the Army Chief of Staff requested funds from Congress in early 1996 to speed up the fielding of these new urgently needed technologies. The Chief of Staff stressed that Congress and the Army could accelerate the development of new technologies by making funds available more quickly than is normally required in the budget process for new programs. In 1996, the Army proposed WRAP as a tool that would help jump-start technologies that were still under development but nearing the production phase. Congress was supportive and added \$50 million to the Army's Fiscal Year 1997 budget.<sup>25</sup>

The WRAP was established to address the gap in funding that exists because of the time required to plan, program, budget, and receive appropriations for procuring a new technology. This gap slows the transition of technology projects to acquisition programs. The funding budgeted for WRAP provided flexibility to the Army to quickly allocate resources in the year of execution to those technology candidates selected for transition according to urgency of need, technical maturity, affordability, and effectiveness.<sup>26</sup> Although the Congress was supportive in budgeting funds for WRAP, it still required that no funds were to be obligated without prior notification to the congressional defense committees that included: Technical Maturity; Criticality and Priority of Warfighting Requirements; Affordability, Effectiveness, and Sustainability in future budget submissions.<sup>27</sup> To promote funding stability, it was intended that WRAP would fund the first two years of a program allowing sufficient time for the Army to build the program into the overall budget.<sup>28</sup>

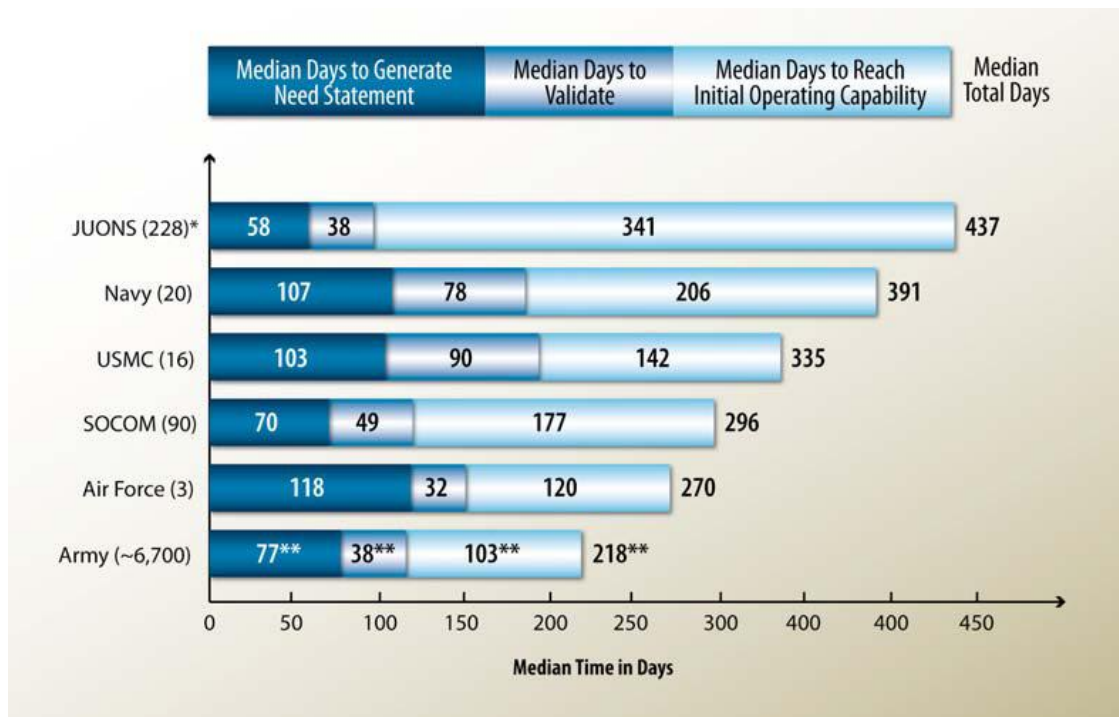
The Army successfully used WRAP for several programs such as Stryker, the Lightweight Laser Designator Rangefinder, and Radio Frequency Tags.<sup>29</sup> According to DoD's 2000 Annual Report to the President and Congress, "the WRAP effort has reduced acquisition cycle time for systems procured by an average of 12 months".<sup>30</sup> Although the Army successfully implemented WRAP, it was not without difficulties and growing pains. The difficulties and growing pains were most notably in the area of requirements—identifying candidates that met differing interpretations of the ambiguous urgency criteria and finalizing its selection of WRAP candidates early enough to ensure timely approval by Congress. Another difficulty encountered was sending a mixed message to Congress about the importance of having dedicated funding for the program and then submitting

the funding as part of an omnibus reprogramming request for other efforts.<sup>31</sup> The end result was a delay in the final approval of funds from Congress and getting them released from DoD that subsequently delayed start up of initiatives thereby partially defeating the intent of WRAP.<sup>32</sup> The lessons to be learned appear to be: 1) adhere to clearly understood criteria for rapid acquisition candidates that unambiguously distinguish them from candidates more suited for deliberate acquisition; 2) enforce a timely process for validation and approval of the candidates by tying staffing timeframes explicitly to personnel performance assessments for example; and 3) if having dedicated funding is important, do not reprogram it. Although there were WRAP successes, the Army is no longer funding WRAP, but is developing other initiatives to rapidly transition technology to Warfighters.<sup>33</sup>

### **Wartime Acquisition**

As described previously, the *deliberate acquisition* and *rapid acquisition* processes consist of three key elements—requirements, resources, and acquisition. The deliberate acquisition process adheres strictly to the JCIDS, PPBE, and DAS for requirements determination, budgeting, and acquisition. However, to meet operational needs identified by deployed units during times of war, the JCIDS and PPBE are supplanted by Operational Need Statements (ONSs) for requirement determination and Supplemental appropriation for funding, but the manner in which acquisition is done within the DAS remains the same. The reason is that the segment of the acquisition workforce that implements the DAS is educated, trained, and experienced to manage and execute programs in a number of environments.<sup>34</sup> The ONS is a nine-line format that Field Commanders use to document and submit their urgent Warfighting operational requirements through the chain of command to Headquarters, Department of the Army, G3/5/7 (HQDA G3/5/7) for consideration and validation.<sup>35</sup> Supplemental appropriation is an appropriation enacted as an addition to a regular annual appropriation act. Supplemental appropriations provide additional Budget Authority (BA) beyond original estimates for programs or activities that are too urgent to be postponed until the next regular appropriation.<sup>36</sup> The ONSs are presented bi-weekly to the Army Requirements and Resourcing Board (AR2B) for final validation, prioritization, and resourcing

decision. The AR2B is co-chaired by the G3 (requirements), G8 (programming), and the Assistant Secretary of the Army, Financial Management and Comptroller (budget). The AR2B is the mechanism for rapid senior leadership decision-making for prioritizing and resourcing accelerated solutions in the year of execution/budget year using Supplemental appropriation.<sup>37</sup> According to the *Fulfillment of Urgent Operational Needs* report the Army has processed more than 6,700 ONSs since the start of the war in 2001. The median number of days to generate an ONS is 77 days and the median number of days to validate the ONS is 38 days. The median number of days to achieve an initial operational capability in the field is 103 days for a total of 218 days from request until delivery or about 7 months. However, this number is skewed to the low end because the vast majority of ONSs submitted by Army units were for redistribution of inventory rather than a new capability.<sup>38</sup> For providing a new Army capability it is reasonable to assume that the time from generating a need to initial operational capability is somewhere within the range reported by the other Services and Joint Staff of seven to fifteen months as depicted in Figure 6.



\* Numbers in parentheses indicate the number of need statements evaluated.

\*\* More than 94 percent of Army ONS (~6,400) were for redistribution of inventory, which skews data to shorter times (e.g., Artillery units now needing infantry equipment, soldiers assigned to guard duty now needing side arms, units creating sniper teams now needing sniper rifles, scopes).

Figure 6. Estimated average time to provide ONS solution.<sup>39</sup>

### Rapid Equipping Force

The Rapid Equipping Force (REF) is an independent entity that emerged in 2002; reports directly to the Vice Chief of Staff of the Army (VCSA); and is under the operational direction of the G3 as a division of the Army Asymmetric Warfare Office (AAWO). The REF reports through the operational chain of command and is not an Army Acquisition Executive (AAE) chartered program.<sup>40</sup> Its mission is to rapidly provide capabilities to Army forces employed globally through current and emerging technologies in order to improve operational effectiveness.<sup>41</sup> The REF accomplishes its mission by leveraging commercial industry to attain three compatible objectives: access to leading-edge technology, acquire affordable products, and to equip the warfighter rapidly. It is a multi-functional and self-contained organization that embeds requirements,



technology, acquisition, budget and logistics capabilities into a single cohesive organization. This unique structure allows rapid analysis and validation of requirements by its staff, rapid approval of the requirement and resource allocation by its Director (a senior colonel), and rapid acquisition of solutions while complying with all existing statutes by its Program Manager (also a senior colonel).<sup>42</sup> As its name suggests, it *equips* rather than *fields* solutions. The REF differentiates between *equipping* and *fielding* as follows: equipping is “a timely and evolvable rapid solution meeting or exceeding minimum doctrine, organization, training, materiel, leadership, personnel, and facilities (DOTMLPF) issues focused on the needs of a specific unit or theater” and has a goal to provide a 51 percent solution; fielding, conversely, is described as “a complete and detailed DOTMLPF approach focused on a general solution for the entire Army.”<sup>43</sup>

The REF receives requirements in the form of a *10 Liner*. The 10 Liner is the baseline document that drives the REF process. It is templated after the Army’s standard ONS and consists of 10 lines. The 10 Liner is endorsed by a battalion or brigade commander, then submitted directly to the REF to initiate the REF process depicted in Figure 7.

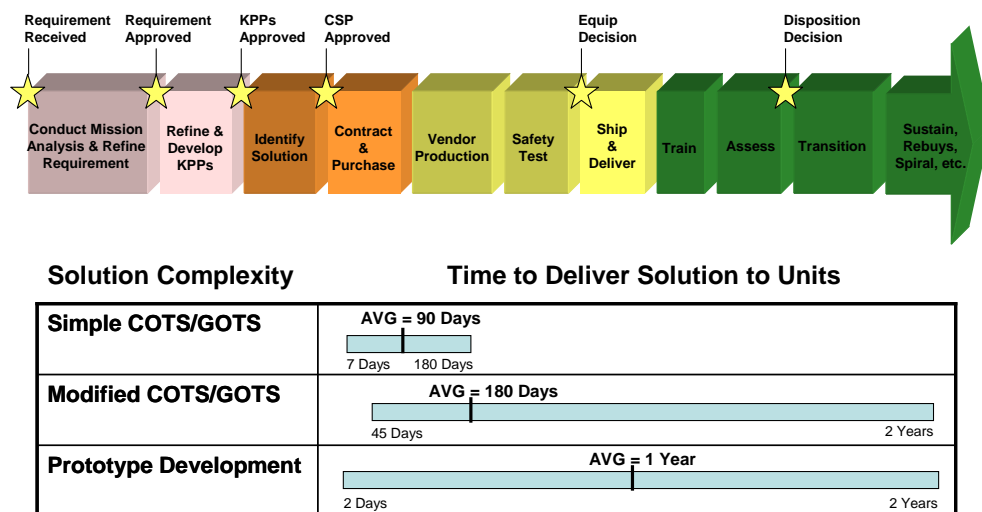


Figure 7 REF Phases and Timeline.<sup>44</sup>

An approved 10 Liner requirement is binned according to priority and solution complexity as depicted in Figure 8.

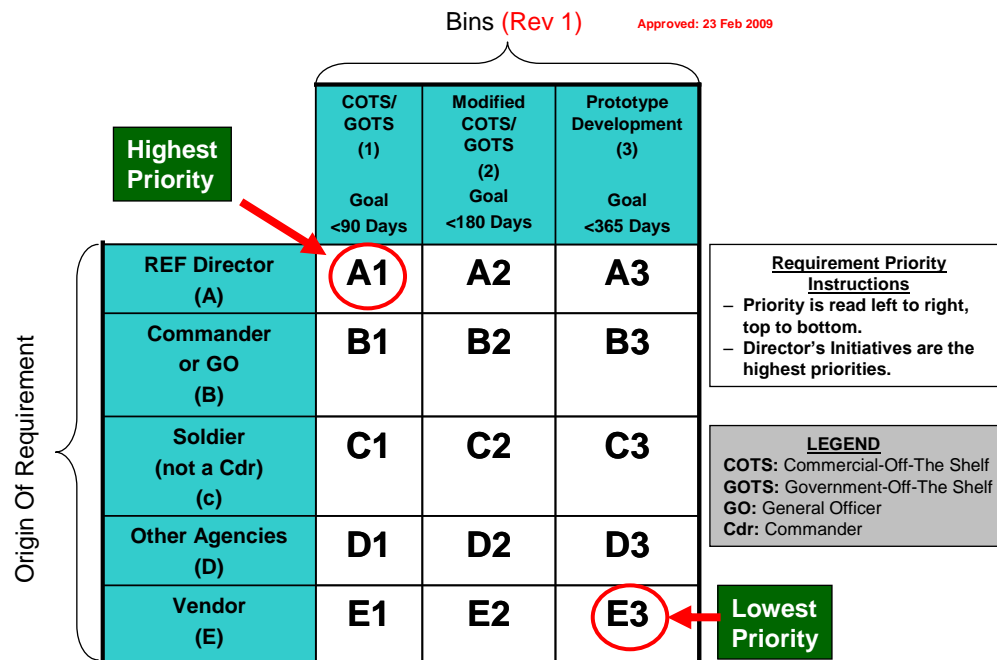


Figure 8 REF Bin Chart.<sup>45</sup>

Each bin is assigned a project lead and each bin has a delivery goal based on the complexity. The REF uses Supplemental appropriations budgeted for the G3 to fund its projects.<sup>46</sup>

To date, the REF has introduced more than 550 types of equipment to the warfighter. Once introduced, the REF provides for and/or coordinates the sustainment of the capability. Additionally, REF recommends solutions to the Capabilities Development for Rapid Transition (CDRT) process (Figure 9).

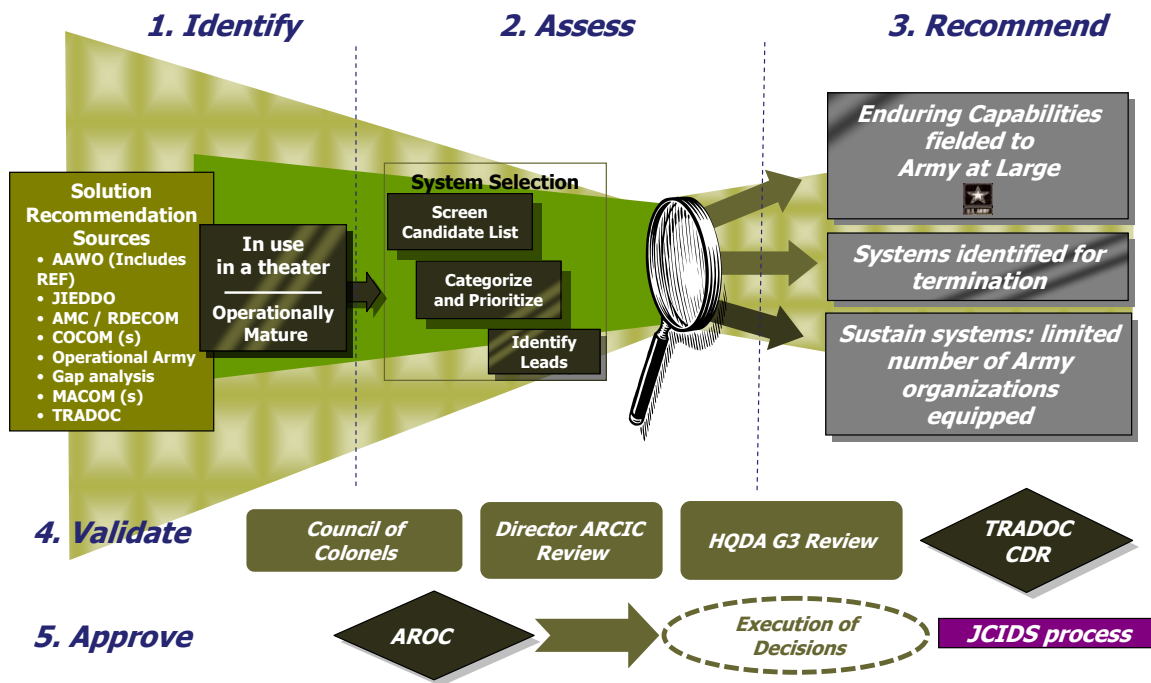


Figure 9 CDRT Process Overview.<sup>47</sup>

The CDRT is a quarterly process that is managed by the TRADOC ARCIC Accelerated Capabilities Division (ACD) in partnership with HQDA G-3/5/7 Capability Integration Division (DAMO-CI). The goal is to significantly reduce the time it takes to field (rather than equip) those selected systems or capabilities deemed as enduring to the Army at large. The process also recommends disposition for those capabilities not selected as enduring, either for retention (i.e. sustain) within the operational theaters or for termination of all Army support. Operational Army unit survey responses provide the basis for recommendations.<sup>48</sup> The CDRT process links the capability derived from the 10 Liner requirement to the JCIDS process at the appropriate entry point such as a CDD or a CPD essentially accelerating the JCIDS process.<sup>49</sup>

The ability of REF to rapidly provide capability to the Warfighter is enabled by several key factors:

1. The REF is tied directly to the Warfighter in contact and is tied into industry and to the Science and Technology community.

2. The decision authority for requirements, resources and acquisition is in one organization (with oversight from the G3).
3. The Director is empowered as the decision authority to approve requirements and to commit funds.
4. The REF is a multi-functional, self-contained organization.
5. Limited scope (i.e. equipping vs fielding) allows appropriate risk taking and focused effort.
6. The REF culture is willing to accept risk and is not afraid to fail—and has *top cover* supporting it.<sup>50</sup>

Arguably, the most important key factor that enables REF to respond quickly to the Warfighter is its limited scope—equipping vs. fielding. This one factor inherently reduces risk to the Army because it is reducing the Army’s commitment to any particular solution or capability until it is assessed in the CDRT process. The limited scope that inherently reduces risk to the Army at large is what allows REF to equip the Soldier in the fight quickly and allows time for the Army to assess whether it should field the capability to the Army at large. On average, it takes 128 days from when the REF receives a request until an initial operational capability is delivered and funded for sustainment up to two years when appropriate.<sup>51</sup>

### **United States Special Operations Command Acquisition**

The United States Special Operations Command (USSOCOM) has a reputation for rapid acquisition whether following a deliberate process or an accelerated process. The USSOCOM is unique in that it is the only combatant command with its own development, and acquisition authority. Under the provisions of Title 10 U.S.C., Section 167, the Commander USSOCOM, has been granted Head of Agency authority and responsibility for the development and acquisition of equipment and the acquisition of materiel, supplies, or services that are peculiar to special operations activities.<sup>52</sup> The definition of what are special operations peculiar is:

1. Equipment, materiel, supplies, and services with no Service-common requirement.
2. Items initially used by SOF until adopted by a Service.

3. Modifications approved by the Commander USSOCOM for application to items used by other DoD forces.
4. Critically urgent items/services supporting Special Operation Forces (SOF) activities.<sup>53</sup>

The USSOCOM complies with the same statutory and regulatory measures as do the military departments in the acquisition of special operations peculiar items and services.<sup>54</sup> Additionally, like the military departments USSOCOM adheres to the same decision-making support systems; JCIDS, PPBE and DAS. There are several factors that make SOF acquisition different:

1. Willingness of the organization to accept a formal requirement at the 70-80% capability level and then evolve the design towards a 100% capability.
2. There is a short chain of command and the small staff is geographically located in the same place; only the Commander and the Special Operations Acquisition Executive (SOAE) can say “NO.”
3. The USSOCOM understands and accepts risk and then aggressively manages it.
4. The maturity of the SOF Operator is the key for accepting risk.<sup>55</sup>

An additional key factor that makes SOF acquisition different from the Services is scope of the acquisition. The quantities procured are generally magnitudes less than the Services, typically modified COTS (or GOTS (*government-off-the-shelf*)), and the majority of the programs managed by SOCOM are ACAT III.<sup>56</sup> The factors that make SOF acquisition different from other Services acquisition are also what make it more rapid. For example the shorter chain of command and smaller co-located staff is conducive to a much shorter staffing process for validation and approval of requirements.

The largest difference is that SOCOM represents a microcosm of DoD 5000, our guiding series of directives and instructions. Our requirements, comptroller and contract personnel; our logisticians and operational testers, as well as the program offices are all located at the same headquarters. This allows us to elevate concerns and issues quickly, when needed, and compresses the coordination cycle time. In this regard, we are unique. What has taken me weeks and months in other organizations can be accomplished in hours and days here.<sup>57</sup>

The USSOCOM staffing schedule for a requirement is approximately 107 calendar days from when the sponsor submits a requirement to the Special Operations Command Requirements Evaluation Board (SOCREB) until it is approved by the Deputy

Commander USSOCOM.<sup>58</sup> In contrast, the Army the staffing schedule is approximately 270 days from when a proponent submits a final draft for validation to TRADOC ARCIC until it is approved by the Department of the Army G3. Both examples assume an Independent JPD by the Joint Staff J8 gatekeeper.

The USSOCOM acquisition always strives for rapid, agile, and effective systems acquisition. In doing so, USSOCOM supplements and tailors the DoD policies, practices, and requirements for its use and implementation (as do the Services). The USSOCOM considers and balances risk and urgency in determining the appropriate method of acquisition—i.e., an acquisition program, an acquisition project, or Urgent Deployment Acquisition (UDA). Efforts that are assessed as being high cost, schedule and technical risk are likely initiated as acquisition programs subject to more of a deliberative approach. Efforts that are determined to be low cost, schedule and technical risk in meeting an approved operational need may be initiated by the SOAE as an acquisition project. Acquisition projects are streamlined efforts (because of assessed low risk) that are assigned one of three Acquisition Project Categories (APCs): 1) Abbreviated Acquisition Project, 2) Commodity Procurement Project, or 3) Safety or Sustainability Modification Project. The APCs facilitate a decentralized, yet structured, decision process and encourages execution agility while ensuring the formal preparation of appropriate planning, execution and decision documentation.<sup>59</sup> When a deployed SOF unit (or unit in pre-deployment training) identifies an urgent and compelling gap derived from a combat survivability deficiency (loss of life) or mission success (failure), it initiates a Combat Mission Needs Statement (CMNS).<sup>60</sup> The SOAE will direct UDA to accelerate the acquisition and fielding of materiel in response to an approved CMNS. An UDA may also be directed by the Commander or Deputy Commander USSOCOM for other urgent, high priority, out-of-cycle acquisitions.<sup>61</sup> To facilitate accelerated fielding of the needed capability, program documentation for UDA projects or programs is waived, deferred, or abbreviated on a case-by-case basis at the discretion of the assigned MDA. Additionally, UDA projects and programs receive intense executive oversight and receive high priority for resourcing, issue resolution, testing, and fielding.<sup>62</sup> Although USSOCOM adheres to the same overarching statutes and policies that are used throughout DoD, it has supplemented and tailored the policies, practices, and requirements to

facilitate rapid, agile, and effective systems acquisition. Additionally, USSOCOM's willingness to accept and manage risk and its short chain of command and small co-located staff further enable rapid acquisition.

### **Recent Studies**

Two recent studies examined how DoD can improve its processes for getting capability to the field faster. One focused primarily on rapidly meeting urgent needs and the other a broad review of the institutionalized deliberate acquisition process. Both studies addressed requirements, funding, and acquisition. The following briefly reviews the scope, findings, and recommendations of each.

#### **Fulfillment of Urgent Operational Needs**

**Scope.** The Defense Science Board chartered a task force on behalf of the Secretary of Defense to evaluate how DoD can field capabilities more quickly to counter today's adversaries who are able to quickly change or adapt their tactics, techniques, and procedures (TTPs). The *Task Force on the Fulfillment of Urgent Operational Needs* was chartered specifically to evaluate the effectiveness of the procedures to generate, validate, and fulfill warfighting requirements. From their evaluation, the task force presented six findings and five recommendations.<sup>63</sup>

**Findings.** The first finding is that needs for systems or capabilities have varying degrees of urgency, technology maturity, and life cycle considerations and therefore cannot be met by the same acquisition processes. The second finding is that the current DoD acquisition workforce is incentivized to strictly adhere to established procedures (not inclined to accept risk) and therefore the concept of *rapid* acquisition, which necessitates creativity and innovation is countercultural and will be undersupported in traditional organizations. The third finding is that attempts to squeeze new technology development into an urgent timeframe increases risk for delay and increases risk that it will not adequately address the need. The fourth finding is that the *ad hoc* organizations and processes that have been implemented across DoD to field capabilities quickly are not synchronized (meaning redundancies), are not institutionalized (i.e., not incorporated in the Services budget process), and are not sustainable beyond the current conflict. The fifth finding is that there is a need for an integrated triage process to essentially prioritize

needs based on urgency, the maturity of technology, and available resources. The sixth finding is that processes, people, and funding are institutional barriers that are powerful inhibitors to successful rapid acquisition and fielding of new capabilities.<sup>64</sup>

**Recommendations.** The first recommendation is for DoD to establish dual acquisition paths depending on the urgency, the availability of technology, and technology maturity. The two paths should be managed in separate organizational elements with separate budgeting guidance. Essentially, one organization to manage *deliberate* acquisition and one organization to manage *rapid* acquisition; both consistent with the DoD 5000 series. The second recommendation is to establish a fund specifically for rapid acquisition and fielding to respond to urgent needs from any combatant command. The third recommendation is to establish a new agency within the office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD (AT&L)): The Rapid Acquisition and Fielding Agency (RAFA). The RAFA will be focused on speed, using existing technologies, and acquisition flexibilities to achieve an initial 75 percent “good enough” solution to address the urgent needs of the warfighter. The fourth recommendation is the funding and manning for RAFA to be absorbed and integrated from the existing *ad hoc* programs and organizations. The fifth recommendation is to establish an integrated streamlined approach for rapid acquisition that tightly coordinates the validation and approval of the need with resourcing and acquisition.<sup>65</sup>

### **Getting to Best: Reforming the Defense Acquisition Enterprise**

**Scope.** The Business Executives for National Security (BENS) formed a task force to review the defense acquisition system and recommend to the Congress and US Government steps to systematically reform the governance and oversight of the process. This task force was comprised of senior business leaders, and former military and government professionals. The Task Force focused on the past two decades of accumulated acquisition system processes and the consequences—intentional and unintended—as antecedents of today’s practices where the process—not the Warfighter—has become the client of the system. The review examined causal factors: law; regulation; policy; actions; the culture within the Department; and, the organizational structure in each segment of the congressional-defense-industrial base



triangle. From the review, the Task Force presented three overarching findings and three recommendations.<sup>66</sup>

**Findings.** Overall, the task force concluded that the acquisition decision-making support systems have become process oriented rather than focused on delivering a product to the Warfighter. Adding issue to the wrong focus is the propensity for requirements creep, funding instability, poor initial cost estimating, immature technology, and the lack of flexibility to solve problems. Further compounding the problem is the fact that many individuals, with little or no accountability, can profoundly impact funding, schedule, personnel assignments, and administrative demands. Programs that fail “tend to be the result of a system that substitutes oversight for insight; confuses management with rules; is risk-averse and failure-intolerant...”<sup>67</sup> Furthermore, the “Task Force believes that the primary causes of delay are a culture that strives to deliver one hundred percent capability on the first article delivered, and turbulence in the funding and requirements processes.”<sup>68</sup> On the whole, the task force determined there are three overarching categories of shortcomings to which acquisition failures are largely attributable. The first overarching category is *Requirements*. There is a significant shortcoming in the linkage between the requirements determination, budgeting, and acquisition processes. The requirements community often determines requirements without realistic input as to what is technically feasible from an engineering perspective, and without adequate input as to what is affordable from a funding perspective. As a result, performance often overshadows cost, and affordability is rarely considered at all. The second overarching category is *Personnel*. Although highly competent in many areas, the acquisition workforce is understaffed in comparison to its workload. This a result of intentional downsizing in the 1990s mandated by Congress. The situation is exacerbated by an aging workforce and the lure of private industry opportunities. The third overarching category is *Execution*. Today, programs are begun without resources to address contingencies, with often unproven technology, poor estimates of production volumes, and no funding flexibility—and are revised frequently.<sup>69</sup>

**Recommendations.** The first recommendation is to fundamentally change the requirement process to emphasize early consideration of affordability, schedule compatibility, technical feasibility, and responsibility for establishing requirements must

be assigned according to time-urgency. The second recommendation is for the defense acquisition personnel management system be modified to assure that key positions in the process are filled by individuals who are knowledgeable and experienced in acquisition, and who remain in place long enough to achieve at least major intermediate milestones. The third recommendation is to modify the acquisition process and incorporate relevant practices widely acknowledged in the commercial sector.<sup>70</sup>

## **Comparison**

Although each study examined the defense acquisition process, the focus of each was slightly different. One specifically examined the processes and organizations established to respond rapidly to urgent needs. The other broadly examined the acquisition processes to identify inhibitors to effectively and efficiently deliver capability to the Warfighter. Although the studies were slightly different, there were similarities in the respective findings. Both characterized a workforce that adhered strictly to established procedure so much as to become process oriented rather than focused on delivering capability to the Warfighter. Additionally, both identified underestimating the maturity of technology as a contributor to schedule delays and cost increases. Another similarity is that both identified a need for dedicated and flexible funding to quickly address contingencies and reduce unnecessary delays. Both also identified a need for better linkage and tighter coordination in requirements determination, resourcing, and acquisition. Therefore, the reoccurring themes appear to be: 1) a need for a more creative and innovative (less risk averse) workforce; 2) tighter coordination between systems engineering and requirement generation for better understanding maturity of technology; 3) more accurate cost estimates; and 4) a need for dedicated funds that give flexibility to rapidly respond to contingencies.

## **Conclusion**

### **Comparing deliberate and rapid acquisition**

Regardless of deliberate acquisition or rapid acquisition the three key elements remain the same: requirement determination, funding allocation, and acquisition. Additionally the four basic questions for decision-makers are the same: 1) What is the

requirement? 2) What is the acquisition strategy? 3) What is the cost? and 4) Is it affordable? Both approaches must comply with statutes that govern acquisition. The speed of either approach is regulated by urgency of need, maturity and producibility of technology, and availability of funding. Additionally, the challenges for both are overcoming barriers imposed by processes, people, and funding. The key differences between the two are the urgency of the need, the maturity and producibility of technology, the scope, and the processes. Urgency is the crucial driver for rapid acquisition and is the rationale for accepting risk as well as the basis for waiving, deferring, or abbreviating prerequisites normally required by policy or regulation. The maturity and producibility of technology is fundamental for rapid acquisition as is understanding the requirement and the willingness to accept something less than 100% of performance requirements. Typically, rapid acquisition supports the immediate needs of the Warfighter in the fight whereas deliberate acquisition seeks to institutionalize the capability to the Army at large. The deliberate approach is better suited for needs that are not deemed operationally urgent/for which technology is yet immature/intended to be fielded to the Army at large. That does not mean that we should not continue to strive for more rapid, agile, and effective systems acquisition that still ensures accountability, cost-effectiveness, reliability, and safety that contributes to the stewardship of taxpayer dollars and the allocation of scarce resources. The processes used by each are different for requirements determination and funding allocation, but the “little a” acquisition aspect remains unchanged. Whereas the deliberate acquisition uses extensive analysis and ICDs, CDDs, and CPDs to document needs derived from Capability Based Assessments, the rapid acquisition uses abbreviated analysis and REF 10 Liners or ONSs to document needs derived directly from units. Whereas deliberate acquisition budgets funding every two years and programs funding out six years based on JCIDS compliant and approved requirements, the rapid acquisition budgets Supplemental appropriations annually to fund urgent operational needs in the year of execution based on validation and approval by the REF Director or HQDA G3. The manner in which the “little a” conducts acquisition for deliberate acquisition or rapid acquisition is essentially unchanged, but tailored based on the urgency of the need.

## Characteristics

Rapid acquisition is characterized by urgency of need, mature technology, limited scope, Contractor Logistics Support (CLS), and willingness to accept risk (Figure 10). The urgent operational need is derived from a compelling gap that is identified and initiated by the Warfighter, endorsed by the chain of command, and validated and approved by the appropriate level decision-maker (e.g., HQDA G3, REF Director). Assigning urgency classification and prioritization to a need should be selective and justifiably linked to either a combat survivability deficiency (loss of life) or mission success (failure). The classification of urgency and prioritization drives the funding allocation process and decision and is the basis for the MDA to use discretion to defer, waive, or abbreviate program documentation required by policy or regulation. The maturity and producibility of technology is a practical driver in how quickly a solution can be provided. For example, a solution that is truly COTS will be faster to deliver than a solution that is a prototype and not in production. The Warfighter or the Warfighter's representative must work closely with the acquisition team to develop cost estimates and to define the performance requirements; establish parameters as to what is acceptable (i.e., 51% vs 70-80% vs 100%); establish a basis of issue; and consider the paramount supportability elements (i.e., Manning, Maintenance, Supply and Training). The scope should be limited to what is necessary to meet the near-term need. Keeping in mind that the greater the scope means greater the commitment of scarce resources; hence leading to greater scrutiny and resulting in less timely decisions. In order to get a capability to the Warfighter sooner, decision-makers need to be willing to accept risk. An example of risk is that after deployment the solution may not be as reliable as needed in a combat environment or may not integrate ideally with other capabilities leading to additional costs to modify or sustain. The additional cost may be the premium paid to get a capability quickly, but decision-makers need to consider that it may be at the expense of another needed capability in a resource-constrained environment. However, this same risk that is present in rapid acquisition can also be risk mitigation if the capability is determined to be enduring and transitions to deliberate acquisition for institutionalizing. Therefore, it can be argued that rapidly acquired capabilities can provide lessons learned in Concept of Operations, Basis of Issue, performance, etc. and lead to a better defined

requirement that has more refined cost and logistic estimates that support deliberate acquisition and fielding of the capability to the Army at large.

Deliberate acquisition is characterized by an operational need that is vital, but does not have the operational urgency that necessitates rapid acquisition (Figure 10). The need is subject to extensive analysis and detailed cost estimates since it is to be institutionalized within the Army and therefore a significant commitment by the Army. Additionally, deliberate acquisition is characterized by complex technology that requires further maturing or integration and manufacturing processes developed or validated. Also indicative of deliberate acquisition is comprehensive testing in all environments and extensive logistics planning that reduces risk and ensures that the fielded solution is operationally effective, suitable, supportable, and safe. Although deliberate, deliberate acquisition should not be unnecessarily slow and the workforce and leadership should work closely as a team and continuously strive to seek efficiencies (especially in staffing) that speed the process and reduce the barriers that impede progress and momentum.

# Comparing Characteristics of Rapid & Deliberate Acquisition



Figure 10 Comparing Rapid and Deliberate Acquisition Characteristics.

## Barriers

The barriers that impede both rapid and deliberate acquisition are processes, people, and funding. Arguably, the single greatest barrier is people and if people can be surmounted than processes and funding can more easily be overcome. The people barrier can be summed up as a workforce that is process focused and the numerous levels of staffing allows many individuals with little or no accountability to profoundly impact funding and schedule. Contributing to the people barrier is that only a portion of the workforce is educated, trained, and experienced in acquisition. Defense acquisition is a team effort that is complex and involves a large workforce entrusted with billions of dollars to translate an operational need into an operationally effective, suitable, supportable, and safe materiel solution. That workforce has a range of functional skills that encompasses requirement generation, resourcing, and acquisition. But of that workforce most of the training, education, and certification programs are aimed at the

Little “a” workforce. No requirements exist for intensive acquisition education, training, or experience beyond a one-week orientation course for the workforce that comprises requirement generation, resourcing, sustainment, and test processes. The workforce that conducts PPBE has no acquisition-specific training requirements at all.<sup>71</sup> This lack of education, training, and experience leads to a very incomplete view and understanding of acquisition as a whole and contributes to a workforce that is narrowly focused on their piece of the process as well as unable to understand their impact of getting a capability to the field. The multiple levels of review and oversight extends the decision-making process and creates an environment where quantity replaces quality, which obliterates clean lines of responsibility, authority, and accountability. Rather than advising and making recommendations to decision-makers, the staffs in effect assume de-facto program authority, stop progress, and increase program scope.<sup>72</sup> Funding will always be a barrier because there is never enough and therefore compels a structured deliberative process that ensures decision-makers are making wise decisions with scarce resources. The processes for requirement determination, funding allocation, and acquisition provide a framework to guide and coordinate complex activities, but are only as effective and efficient as the people that lead and implement them.

### **Managing expectations**

Although it is unfortunate, the reality is that next day delivery of a materiel solution to counter an identified emerging threat is highly unlikely. Therefore, the near term solution will necessarily have to involve adjusting TTPs until a materiel solution can be delivered. Regardless of rapid or deliberate acquisition, the three key elements are the same—requirement generation, funding allocation, and acquisition. Breaking those down into the primary activities of generating, validating and approving the requirement, identification and allocation of funding resources, and then acquisition all require some amount of time to complete. The time is necessary to answer the four basic questions for decision-makers: 1) What is the requirement? 2) What is the cost estimate? 3) Is it affordable? and 4) What is the acquisition strategy? How quickly the Army is capable of moving through these activities to answer the questions and make decisions depends on the urgency of the requirement as well as the path of the requirement. The fastest path to

validate and approve a requirement and allocate funding is a 10 Liner to the REF, followed by an ONSs to HQDA G3 and then a JCIDS compliant document to the Joint Staff. Once a requirement is approved and resourced, the next consumer of time is the acquisition process. The maturity and producibility of the technology to address the need is the significant factor for time. Generally speaking, a COTS solution will be faster than a modified COTS solution, which will be faster than a developmental effort. Therefore, the fastest delivery of a capability will likely take at least four months and be a rapid-equipping action that is a COTS solution to a 10 Liner submitted to and approved by the REF. The REF is capable of a quick turn primarily because it is tied directly to the units, is comprised of all the functional skills necessary for acquisition (i.e. requirement, resource, acquisition), commits Army to small numbers, and most importantly the REF Director is the decision authority for approving requirements and committing resources thereby significantly reducing staffing time. A requirement initiated as an ONS can reasonably be expected to be delivered in 7–15 months while a requirement initiated through the JCIDS process can reasonably be expected to take 60–72 months for a COTS/modified COTS solution or 96 plus months for a solution that is technically complex and requires further maturing or integration. The REF 10 Liner and ONS paths are significantly less than the JCIDS path attributed primarily to urgency of need, but also less extensive analysis, limited staffing, limited scope, reliance on mature technology (i.e., COTS) and to a large extent the availability of Supplemental funding. Whereas the JCIDS path takes longer because of more extensive analysis, global staffing, greater commitment of resources, more likely technically complex, and funding is budgeted in two year cycles and programmed out for six years. The 10 Liner and ONS paths deliver capability to meet immediate needs of the warfighter, but accept risk for the sake of urgency in areas such a performance, supportability, integration, etc, that can increase lifecycle cost. The JCIDS path produces operationally effective, suitable, reliable and safe capabilities with consideration of life-cycle cost, but at the expense of speed. In all cases, the workforce and leadership should continuously strive to attain efficiencies, agility and flexibility to deliver capability to the warfighter faster. Figure 11 depicts timelines associated with various requirement paths.



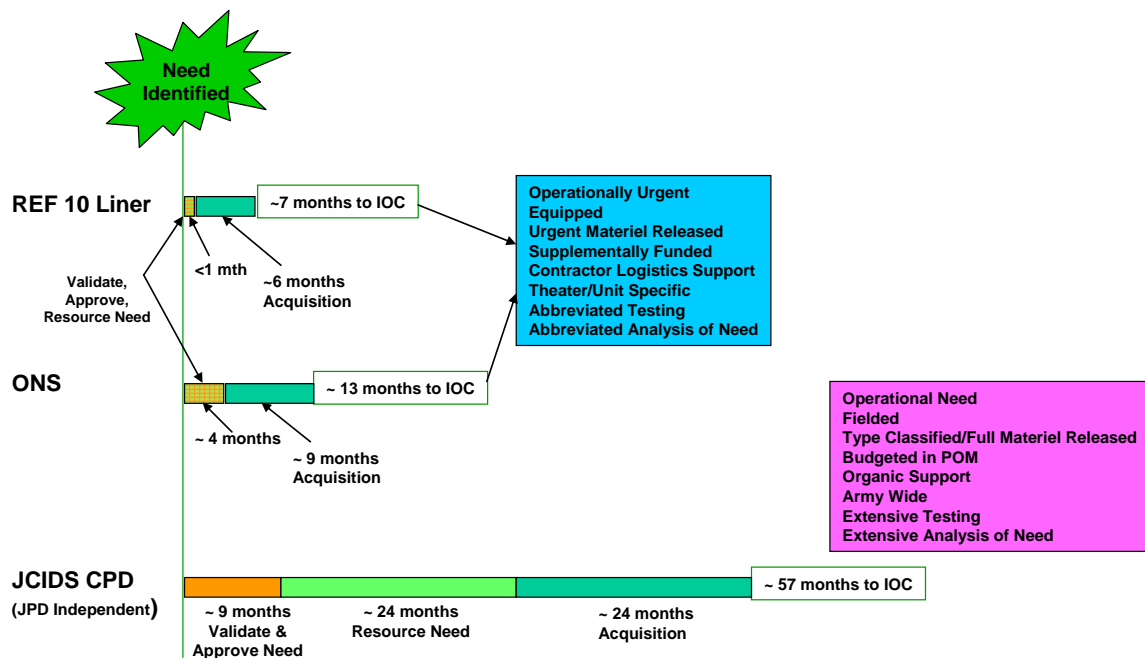


Figure 11 Timelines for Modified COTS Solution.

## Recommendations

The Army continues to provide capabilities to the Warfighter assuring that he is the best equipped on the battlefield. However, the Army continues to struggle with providing capabilities in quantity to quickly counter evolving threats; especially when its ability to do so is measured in days and ideally in next day delivery. Next day delivery may be unachievable, but the goal for everybody involved should always be to strive to seek efficiencies wherever possible in the process to not only get capability quickly to the Soldier in the fight but also to the Army at large. As long as we are in persistent conflict and a resource constrained environment, there will be competing needs to rapidly acquire new capability to counter emerging and evolving threats and a need to deliberately acquire new capability for the Army at large. Leaders and staffs should not view the different processes for validating and approving requirements and resources between rapid and deliberate acquisition as competing with each other. Rather, they need to understand how they relate to each other and seek synergy from the two to efficiently transition those capabilities that are enduring. Additionally, leaders and staffs need to

understand that regardless of rapid or deliberate acquisition, there is one acquisition process and it is agile and adaptive enough for both rapid and deliberate acquisition. The ability of the *Little "a"* workforce to be agile and adaptive is directly attributable to its leadership, but can also either be enabled or hindered by the requirement determination/funding allocation processes. The following general recommendations are intended to improve the speed with which capabilities are fielded to Soldiers in the fight or to the Army at large.

## **People**

1) *Workforce*. Implement an education, training, and experience program for the total workforce, not just the *Little "a"* workforce, that certifies individuals in their functional area and also cross trains them in the basics of the other functional areas.

*Rationale*. This makes for a better informed workforce that can more effectively work as a team. Individuals need to be certified experts in their roles and responsibilities and also be familiar with the roles and responsibilities of the other members of the team to understand how the functional areas interrelate. Just as important individuals need to respect the role and responsibilities of the other members of the team and recognize the line of authority in a given phase of a process.

2) *Leadership*. The leadership responsible for the activities in a given phase for a given process (e.g., requirement determination, funding allocation, acquisition) must establish clear lines of authority when in the lead and just as important they must support the lines of authority when in the supporting role.

*Rationale*. If clear lines of authority are not established and enforced well intentioned individuals and staffs will assume de-facto authority and create confusion effecting program progress. It is up to the leadership to set the tone as to how staffs and functional areas interact.

3) *Leadership*. Be technically competent; know the processes and know the statutes, policies and regulations that govern them. Be creative and innovative to the full extent permitted by statute. Encourage the same and do not create a zero defect environment.

*Rationale.* Leaders that thoroughly understand the processes and know the statutes, policies and regulations that govern them can be more effective at being creative and innovative in implementing the processes. Leading by example will set the tone to the workforce to be less focused on process and more focused on capability.

## **Process**

1) Do not establish two separate *Little “a”* acquisition processes, but do institutionalize the processes that rapidly identify, validate and approve urgent requirements and that allocate resources in the year of execution for urgent requirements.

*Rationale.* There is no need for two separate *Little “a”* acquisition processes because tailoring is explicitly permissible facilitating either rapid or deliberate acquisition. It is up to acquisition leadership to be creative and innovative, to exercise discretion and to apply good judgment in doing so. The AR2B process should be institutionalized because it establishes operational urgency of need, validates, prioritizes and resources ONSs in the year of execution using Supplemental appropriations. The ONS is a direct link from the field to the HQDA through command channels.

2) Institutionalize the CDRT process.

*Rationale.* The CDRT process assesses the capabilities that are derived from urgent needs stated in ONSs and REF 10 Liners and assigns disposition categories to them as either enduring, sustain or to terminate. For those that are enduring, the CDRT process is the link to the JCIDS process for institutionalizing the capability.

3) Upfront planning for ONSs and REF 10 Liner requirements should consider at a minimum Manning, Maintenance, Supportability, and Training. The planning should also include sustaining and the cost to sustain the capability for a minimum of six years.

*Rationale.* For planning purposes, the disposition should be assumed to be sustain until the capability is formally assessed in the CDRT process. If assessed as enduring, it will take approximately six years for it to be displaced by the materiel solution delivered through the deliberate process.

## **Funding**

1) Seek support from OSD and Congress to budget and program some level of dedicated funding that provides flexibility in the year of execution to support acquisition of urgently needed capabilities during war or small scale acquisition of promising new capabilities during times of peace that use mature technologies (i.e., COTS).

Rationale. Dedicated and flexible funding is paramount to rapid acquisition and facilitates providing urgently needed capability during time of war and presents opportunity in times of peace to capitalize on promising new capabilities. Supplemental appropriation is used now, but it is annual funding that is unpredictable making it difficult to plan long term and it will not be available once the war ends.

## **Organization**

1) Institutionalize REF.

Rationale. The REF is a direct conduit to the Warfighter on the battlefield and is the shortest path of getting a capability to the Warfighter relatively quick. It is not the means for fielding a capability to the Army at large, but represents an opportunity for the Army to learn and better understand the need on a small scale before making a larger commitment of resources. Additionally, the REF concept is applicable during times of peace when it can be aligned with the Combat Training Centers and the Army's Expeditionary Task Force to focus on COTS solutions and advanced prototypes.

2) REF should remain aligned with G3.

Rationale. The REF PM provides the direct acquisition support to the REF Director who is the decision authority for requirement approval and commitment of resources in direct support of deployed units. The REF concept is successful because it is small, represents relatively small commitment of resources and all of the necessary functional skills are collocated forming unity of effort and unity of command.

3) An ASA(ALT) LNO should be assigned to the REF (rather than a REF LNO to ASA(ALT)).

Rationale. The objective would be twofold: the first objective is to reduce duplication of effort by coordinating PEO/PM support to those requirements that align closely with an existing PM. The concept would be for that PM to receive approved

requirement and funding from REF and directly support the REF Director on that project for a predetermine scope effort. The second objective for the ASA(ALT) LNO would be to identify those issues that may become “third rail” issues due to political sensitivities (i.e., body armor) and ensure the REF Director and senior leaders are aware and to coordinate and synchronize the Army position and response. The intent would be to raise situational awareness so that the Army can knowingly get ahead of the issue or knowingly mitigate risk.

Successful organizations have “short, unambiguous lines of communication among levels of management, small staffs of highly competent professional personnel . . . [and] most importantly, a stable environment of planning and funding.”

“President’s Blue Ribbon Commission on Defense Management.

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